

Miscellaneous.

WESTMINSTER ABBEY.—Some years ago I saw in your paper, most of the improvements recommended which have since been carried out here with much advantage and credit to the clergy and the people. Formerly in the chancel choir a few hundred persons on Sundays came in and out during the celebration of divine service, but now there is often a congregation of 2,000 persons most reverently attending the morning, afternoon, and evening services. I am sure you will entertain the clergy to keep pace with the laity by affording all the aid in their power: much more accommodation could be provided: at least 100 seats could be placed in the choir, all looking towards the altar: the sadly out-of-place and annoying ropes could be creditably removed: seats on hinges could be placed from Poet's-corner to the north door on each side of the way: the sermon could be more efficiently preached from the N.W. pier instead of the N.E. pier, since the voice would reach the hearers better, as 100 in front, to 20 behind, and 80 on either side, consequently all would hear more distinctly, especially at Poet's-corner, where not a word can be understood: the preacher might, for the occasion, occupy a stall near the pulpit, avoiding the occasion to go down all through the choir, setting the constables into a pretended ferment with the people for not making way with more alacrity. The Abbey professedly opens at twenty minutes before the hour, and during Dean Oxford's time thirty minutes before the hour; but now it never opens till the quarter has struck out of doors: the lost five minutes would enable the aged and females to obtain seats, which becomes impossible when that time is lost through the great accession of numbers, and the vergers are not respectful persons.

TEST OF CHAINS AND IRON RODS.—On Friday evening several gentlemen interested in scientific experiments, attended at the cable manufactory of Mr. H. P. Parkes of Dudley, to witness some tests of the strength and toughness of iron used in the fabrication of chains. Several samples of round chains, 5-8 inch size, were put to hydraulic proof, and whereas the interspace between the links previous to their tension measured only 32nd of an inch, after proof it had stretched equally to 15-16 inches. One of these pieces of 5-8 inch chain sustained, without a flaw, 18-10 tons, being nearly four times the ordinary testing weight. The material furnished by Messrs. Millington and Co., Summerhill Ironworks, Tipton, stood the severest test. Its fabric is a novelty to the trade, and will shortly be patented. Mr. Parkes has contributed a sample board of the chain to the Great Exhibition, in sizes varying from 1 to 2½ inches. This series of experiments terminated with the tying in iron of "the Staffordshire knot." A piece of 5-8 inch round of Mr. Millington's iron, formed into a noose at each end, and gracefully formed into a loose tie, was drawn in cold metal into a tight compact knot, lifting in the process the unparalleled weight of eight tons. Parties visiting the Crystal Palace may inspect the chain, the knot, and the peculiarly twisted iron of the Millington make in the Class No. 8 among the ship models near the west end.—*Staffordshire Advertiser.*

METROPOLIS WATER BILL.—The following is a copy of the scale of water-rates proposed to be inserted in schedule (B) of the Metropolis Water Bill: being a return to an order of the House of Commons on Monday:—"For water supplied to any dwelling-house for domestic purposes:—Where the house contains not more than one room, a rate not exceeding 3s. per annum. Where the house contains two rooms and no more, a rate not exceeding 5s. per annum. Where the house contains more than two rooms, a rate to be charged according to the number of rooms in each house, at not exceeding such amount for each room as hereinafter mentioned; that is to say, where the house contains more than two and not more than six rooms, at not more than 3s. per annum for

each room. Where the house contains more than six and not more than nine rooms, at not exceeding 3s. 6d. per annum for each room. And where the house contains more than nine rooms, at not exceeding 4s. per annum for each room. If there be a bath in any dwelling-house, then, in addition to the rate above specified in respect of such dwelling-house, the sum of 5s. per annum for each such bath shall be payable. [But no addition to the rate above specified for the water supplied to any dwelling-house shall be charged in respect of any watercloset therein.] For water supplied to any stable, a rate to be charged according to the number of stalls in such stable, not exceeding 3s. 6d. per annum for each stall. For water supplied to any coach-house, where the same is constructed to contain one carriage only, a rate not exceeding 3s. 6d. per annum; and where the coach-house is constructed to contain more than one carriage, a rate to be charged according to the number of carriages the same is constructed to contain, at not exceeding 3s. 6d. per annum for each carriage. For water supplied for the purposes of any manufacture or business, such rates as may be agreed on between the company and the person supplied, not exceeding 6d. for every 1,000 gallons."

FIRE ESCAPES.—The late calamitous fire in the City is another loud call upon public attention, to the means of rescuing the lives of our fellow-mortals from so awful and devouring an element. It is painful to think of, as well as difficult to account for, the apathy and seeming indifference, so prevalent amongst the inhabitants of crowded cities upon a matter involving human life. We shudder when we read of so sad a loss as the one before us; but the remembrance of it almost ceases with the thrill which passes through us, and again we fall back into our former state of indifference, and become almost or quite unconcerned as to whether human ingenuity has already contrived, or ever can contrive, anything like a safe and useful "Fire Escape." Many months ago, an article appeared in your journal, from the pen of one of your correspondents, in which a very earnest call was made upon mechanical ingenuity to do its utmost to send some "fire escapes," which might appear among the "lions" of the "Great Exhibition of 1851." Many have responded to that very laudable and praiseworthy call, and seem to have done their utmost in this public and humane cause; and if nothing has been or can be found, singly, to accomplish this very desirable end, cannot some committee be appointed to meet such exhibitors, and thus, from combined ingenuity, endeavour to ascertain if some really useful machine cannot be brought out. With enlightened mechanics, all ideas of self-interest, I doubt not, would quickly merge into the better feelings of humanity, and the earnest endeavours to become the means of saving human life.—R. T.

PATENT VITRIFIED PIPES, BRICKS, &c.—The *Northampton Herald* says, "We briefly called attention to a process of making vitrified bricks, discovered by Mr. Elliott, of Blisworth. Further details will, perhaps, not be uninteresting. The materials are—clay, limestone, chalk, sand, oyster-shells, &c., and are run into a liquid state in a hot blast furnace, and carried in a ladle to cast-iron or sand moulds. The moulds to be made to open and shut, similar to those used for casting of glass, and, when partly filled with liquid, press an iron pin or core into the mould before the liquid sets, which will cause the liquid to rise round the core and fill the mould. When set, draw the pin out; but if a sand core is used, it may remain in until the pipe is cold, and then be washed out. All articles made one inch thick and less in iron moulds will be sufficiently annealed and fit for use by remaining in the moulds, covered up with dry sand, twelve hours. The raw material requires no further preparation previous to melting than drying by the aid of the waste heat from the furnace; or the clay may be roasted in heaps, similar to preparing ballast for roads. The cost of the raw material and fuel will vary considerably, according to situation, and, consequently, the

price per ton of liquid. In establishing a new manufactory, this system is decidedly the least expensive, particularly if a steam-engine, water-mill, or other power to generate blast be already on the spot, as very little building or ground is required, a large stock in hand not being necessary, as any article can be made to order at any season of the year. The cost of a steam-engine and blowing machinery will be about 130*l*. Hot-air oven and furnace, 60*l*.

THE TIMBER TRADE.—The following remarks are from the circular of Messrs. Churchill and Sim:—"The import duty on foreign wood reduced on hewn, or timber, from 15*s*. to 7*s*. 6*d*. per load, and on sawn, or deals, from 30*s*. to 10*s*. per load, by the resolutions of the House of Commons, took place on the 16th April last; and it may be assumed that these resolutions have the force of law as regards prices in the London market. Christiana deals of 1850 import had ruled very equably, until the stock was sold, at 24*l*. per hundred 12-feet for yellow deals, and at 21*l*. for white. On the arrival of fresh in April, under the remission of duty, the prices realised were 22*l*. and 19*l*. yielding two-thirds of the reduction to the consumer, and one-third to the producer. The prices of Baltic fir timber advanced during the winter, and, with active demand and stock barely adequate, continue to rise when further stimulated by the expected change in the tariff. The importation commencing almost simultaneously with the reduction in duty, and the supply brought to this market being unexpectedly large, new prices opened at 10*s*. or 12*s*. 6*d*. less than the quotations under the former duty, while the reduction of duty amounted to 7*s*. 6*d*. only. This has encouraged business, and will make Baltic timber the leading article for some time to come, although advanced shipping prices in the Baltic must enhance the value presently. Dantzic and Memel fir timber of common qualities, which in March were sold from 60*s*. to 65*s*. per load, now sell from 50*s*. to 52*s*. 6*d*. For Petersburg deals the selling price was 14*l*. to 14*l*. 5*s*. standard: it is now 12*l*. 10*s*. to 12*l*. 15*s*., deducting thus all the difference of duty. In our market for colonial wood we cannot at present trace any sensible effect by the change in foreign duty. It is evident that the reduction will stimulate consumption, and its effect will not be limited to foreign wood, but carry with it a fair share of cheap colonial wood also.

LEWES CASTLE, AND THE SUSSEX ARCHAEOLOGICAL SOCIETY.—Since the Sussex Archaeological Society has taken possession of the Castle at Lewes, repairs have been commenced. The infant school and wool warehouses, which impede the sight of the gateway, are to be pulled down, piles of stones and bricks removed, and the Castle-yard thrown open to visitors. The purchaser of the materials has engaged to use expedition in pulling down the buildings and removing the materials. The apartments of the warden are improved. When the society takes full possession of the gateway and the eastern tower, it is believed they will soon gather together a collection of local antiquities worthy of the county.

THE CRYPT AT GUILDHALL, LONDON.—We recently gave some particulars of the crypt under Guildhall, and communicated the information that access to it could be had without difficulty. We find that a large number of persons have visited it within the last fortnight. There is in the crypt a large red granite bowl of enormous weight, which has attracted much curiosity. The *Times* gives from the Corporation journals, of the year 1802, the following notice of the present made of this bowl to the city of London, as a memorial of great military achievements:—

"Major Cookson, commanding the Royal Artillery in Egypt, presents his respectful compliments to the Lord Mayor and Corporation of the city of London, and begs to acquaint them that he has taken the liberty to ship on board the *Asserson* transport, Allan Masingham, master, a large antique Egyptian red granite bowl, and which Major Cookson requests the Lord Mayor and Corporation will do him the honour to accept, as a testimony of his respect and a memorial of the British achievements in Egypt.

"Alexandria, Sept. 1, 1802."